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EXAMINER

WENDMAGEGN, GIRUMSEW

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claims 1-28 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 19-20, 22 rejected under 35 U.S.C. 102(e) as being anticipated by over Honjo (Pub No US 2002/0061181),

Regarding claim 19, a personal video recorder (PVR), comprising: a video encoder configured to encode an input signal corresponding to a program into a higher quality copy of the entire program for storage in a storage (see paragraph 0011, 0052; figure 1); a transcoder configured to convert in the storage the higher quality copy of the program into at least one copy of the entire program with lesser quality for simultaneous storage along with the higher quality copy of the program (see paragraph 0010, 011 re-encoding), the simultaneous storage rendering both copies available for a potential replaying for a user (see paragraph 0011, 0052); and a storage manager configured to

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inspect the policies within a policy store associated with the storage manager and to apply selected ones of the policies to copies of the program so as to manage consumption of the storage (see paragraph 0010-0011).

Regarding claim20, the PVR of claim 19, wherein the transcoder stores the higher and at least one lesser quality copies of the program as components of a scalable bitstream (see paragraph 0011, 0052).

Regarding claim22, the PVR of claim 19, further comprising: a video decoder configured to be used in conjunction with retrieving a best available copy of the program from the storage, configured to convert the best available copy of the program into an output format suitable for presentation to a display (see figure1 element 11).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim1, 7-11, 21, 23, 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Honjo (Pub No US 2002/0061181), and further in view of Okuyama (pub No US 2002/0141580).

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Regarding claim1, 21, 23, Honjo anticipates a method for digitally storing a received program, comprising: storing, by a computing device, the entire received program as a first digital copy having a first quality level (see paragraph 0011,0052); converting, by the computing device, the first digital copy into a second digital copy of the entire received program, having a second quality level of lesser quality than the first quality level (see paragraph 0011,0052); storing, by the computing device, the second digital copy simultaneously along with the first digital copy, the simultaneous storage rendering both copies available for a potential replaying for a user at a later time (see paragraph 0011,0052) but does not teach after a period of time during which both copies are available for a potential replaying for a user, applying, by the computing device, a retention policy which instructs deletion of at least a selected ones of the stored first and second digital copies. However, Okuyama teaches erasing first digital copy after a predetermined period of time after the data is outputted (see paragraph 0048).

One of ordinary skill in the art at the time the invention was made would have been motivated to erase one of the copy after period of time passed in order to make copy control much effective.

Regarding claim7, Honjo teaches the method of claim1, further comprising: determining, by the computing device, a bitrate and an encoding format for the first and second digital copies, wherein the first and second quality levels are determined based

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at least in part on the bitrate and the encoding format utilized (see paragraph 0069-0071).

Regarding claim8, Honjo teaches the method of claim 1, wherein the first and second quality levels are determined based at least in part on a bitrate utilized to encode the first and second digital copies (see paragraph 0069-0071).

Regarding claim9, Honjo teaches the method of claim1, wherein the first and second quality levels are determined based at least in part on an encoding format utilized to encode the first and second digital copies (see paragraph 0069-0071).

Regarding claim10, 11, see the teaching of Honjo and Okuyama above. Both do not teach recording the third copy with one of the first and second copy. However, it is obvious to one of ordinary skill in the art to copy multiple times the same content with different quality in order to perform different process.

Regarding claim25, Honjo teaches the article of claim 23, wherein the programming instructions are further designed to determine a first bitrate for encoding the first digital copy (see paragraph 0087); and determine a second bitrate for encoding the second digital copy (see paragraph 0087); wherein the first and second quality levels are respectively determined based at least in part on the first and second bitrates (see paragraph 0087-0088).

Claim2-6, 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Honjo (Pub No US 2002/0061181) and Okuyama (pub No US 2002/0141580) as applied to claim1, 7-11, 21, 23, 25 above, and further in view of Greenwood (pub No US 2003/0198458).

Regarding claim2, 24, see the teaching of Honjo and Okuyama above. Both do not teach receiving, by the computing device, a request to schedule a recording of the program; determining, by the computing device, a recording quality and a longevity for the program; and associating, by the computing device, the recording quality and longevity with the program, wherein applying the retention policy is performed based at least in part on associated desired longevity. However Greenwood teaches receiving, by the computing device, a request to schedule a recording of the program (see paragraph 0002); determining, by the computing device, a recording quality and a longevity for the program (see paragraph 0018); and associating, by the computing device, the recording quality and longevity with the program (see paragraph 0019), wherein applying the retention policy is performed based at least in part on associated desired longevity (see paragraph 0019).

One of ordinary skill in the art at the time the invention was made would have been motivated to determining a recording quality and longevity as in Greenwood because it would make managing storage device capacity much effective.

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Regarding claim3, Greenwood teaches the method of claim 2, wherein the recording quality comprises high, medium and low quality (see paragraph 0022, quality levels low, medium and high).

Regarding claim4, Greenwood teaches the method of claim 2, wherein determining the quality and longevity comprises a selected one of: utilizing a default quality and longevity or prompting for the desired quality and longevity (see paragraph 0019).

Regarding claim5, Greenwood teaches the method of claim 2, wherein longevity comprises long, medium, and temporary, and wherein applying the retention policy further comprises comparing associated quality settings and longevity to determine which stored copy of a program is to be deleted (see paragraph 0019).

Regarding claim6, Greenwood teaches the method of claim 1, further comprising: receiving, by the computing device, a request to schedule a recording of the program, the request having an associated quality to utilize for recording the program (see paragraph 0002); inferring, by the computing device, a longevity for the recording based on the associated quality (see paragraph 0017); periodically, during the inferred longevity, selecting, by the computing device, a stored copy of the program and determining a lesser quality for the stored copy based at least in part on how long of the inferred longevity the stored copy has been stored (see paragraph 0023, length of time

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a video has been stored); and degrading, by the computing device, the stored copy of the program in accordance with the lesser quality (see paragraph 0034).

Claim 12-18, 26-28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Honjo (Pub No US 2002/0061181), and further in view of Zimmermann (pub No US 2003/0147631).

Regarding claim 12, 26, Honjo teaches method for digitally storing a received program, comprising: receiving, by a computing device, a first program (see paragraph 11, first MPEG data); first converting, by the computing device, the entire first program into a first higher quality copy and a first lower quality copy, and storing the first higher quality copy along with the first lower quality copy in a storage simultaneously (see paragraph 0011, 0052), the simultaneous storage rendering both copies available for a potential replaying for a user at a later time (see paragraph 0011, 0052) but does not teach determining, by the computing device, there is insufficient space in the storage for storing a second higher quality copy for a second program; and after a period of time during which both copies are available for a potential replaying for a user, deleting, by the computing device, at least one of the first higher quality copy and the first lower quality copy to make room within the storage for storing the second higher quality copy. However Zimmermann teaches determining amount of space and deleting previously recorded item to make room for new recording (see figure 8 step 816 and 834).

One of ordinary skill in the art at the time the invention was made would have been motivated to delete previously recorded content as in Zimmermann because it would allow the user to record new content.

Regarding claim13, Zimmermann teaches the method of claim 12, wherein stored copies of the first program each have an associated retention policy, and wherein the deleting the at least one of the first higher quality copy and the first lower quality copy is performed based at least in part on said associated retention policies (see paragraph 0068, storage manager preferably delete previously recorded item).

Regarding claim14,15, Zimmermann teaches the method of claim 13, wherein the deleting the at least one of the first higher quality copy and the first lower quality copy is performed based at least in part on storage requirements for the second higher quality copy of the second program (see figure8 step816 and 834).

Regarding claim16, 27, Honjo teaches the method of claim 12, further comprising: receiving, by the computing device, the second program; second converting, by the computing device, the second program into the second higher quality copy and a second lower quality copy (see paragraph 0011,0052); and storing, by the computing device, the second higher and lower quality copies in the storage simultaneously, the simultaneous storage rendering both copies available for a potential replaying for a user at a later time (see paragraph 0011,0052).

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Regarding claim 17, 28, Honjo teaches the method of claim 12, further comprising: determining, by the computing device, a first quality level associated with the first program, wherein converting the first program into the first higher quality copy comprises encoding the first program with a bit rate determined based at least in part on the first quality level (see paragraph 0086-0087).

Regarding claim 18, Zimmermann teaches the method of claim 12, further comprising: applying, by the computing device, selected ones of global policies to all stored copies; and altering, by the computing device, the stored programs in accord with a selected global policy (see paragraph 0068).

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GIRUMSEW WENDMAGEGN whose telephone number is (571)270-1118. The examiner can normally be reached on 7:30-5:00, M-F, all Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tran Thai can be reached on (571)272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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